

## Abstract

Circuit for selecting a second set of binary inputs according to the number of high input signals applied to a first input set. A first subcircuit has the first input set, logic  
5 generating control output signals, each control output signal represents whether the first input set has exactly a predetermined number of high input signals. Each control output signal corresponds to a different predetermined number of high input signals. A second subcircuit has a second input set, a set of control inputs for receiving control output signals from the first subcircuit, and logic including a plurality of switches including  
10 one or more pass gates. Each switching component switches to connect or isolate one of the second input set to a common output. The control inputs control the switches. The first and second subcircuits are configured such that only one switch can be switched to connect at a time.